V
OTHER AGENCY REQUIREMENTS

Other federal, state and local regulations may relate to your implementation of best management practices.

The purpose of this chapter is to provide you with information on a variety of other federal, state and local regulatory areas which may relate to your implementation of best management practices. In many cases, these summarized regulations have requirements that, if properly adhered to, will also prevent or reduce stormwater pollution. Seventeen regulatory programs are briefly described.

This information is intended as a cursory introduction. Before taking any action on the regulations discussed here, contact the appropriate agency for the complete information and to ensure full compliance if necessary.

King County Code 9.12

The code "prohibits the discharge of contaminants into surface and stormwater and groundwater, and mandates development of preventive measures to reduce contaminants from entering such waters."

The purpose of King County Code 9.12 is to protect the County's surface and groundwater quality by providing minimum requirements for reducing the discharge of contaminants into the County's surface and stormwater systems. The code "prohibits the discharge of contaminants into surface and stormwater and groundwater, and mandates development of preventive measures to reduce contaminants from entering such waters." The code gives the County authority to investigate possible violations and to take such actions as required to enforce its provisions.

The code applies to all people within unincorporated areas, existing businesses and residents, as well as construction activities not covered by the existing *King County Surface Water Design Manual.*

The code makes it unlawful for any person to discharge any contaminant into surface and stormwater or groundwater. Discharge is broadly defined to include indirect discharges associated with stormwater runoff, and direct discharges through spills, dumping or other releases of contaminants. Illicit connections to the storm sewer system or a water body is prohibited. Disallowed contaminants include, but are not limited to: trash or debris, construction materials, petroleum products, antifreeze and other auto products, particulate or dissolved metals, flammable or explosive or radioactive materials, batteries, acids, alkalis, bases, paints, stains, resins, lacquers, varnishes, degreasers, solvents, drain cleaners, pesticides, herbicides, fertilizers, steam cleaning waters, soaps, detergents, ammonia, swimming pool backwash, chlorine, bromine and other disinfectants, heated water, domestic animal waste, animal carcasses, food wastes, bark and other fibrous materials, collected lawn clippings, leaves or branches, silt, sediment or gravel, dyes, chemicals not normally found in contaminated water, and any hazardous material or waste not listed above.

This section of the code also lists 10 actions or substances as being allowable discharges. These are: potable water, potable

For more information:
King County Surface Water Management
(206) 296-1900

water flushing, lawn watering, uncontaminated water from crawl space pumping or footing drains, flows from riparian habitats and wetlands, residential car and boat washing, dechlorinated swimming pool water, natural uncontaminated surface or groundwater, certain discharges from boats, and other discharges as determined by the director.

The code directs the King County Surface Water Management Division to develop a manual which requires the use of best management practices (BMPs) to control contaminants. In applying the manual, the County first requires the use of source-control BMPs. If these are not sufficient, the County may require the treatment BMPs.

People exempt from following the BMP manual include: people conducting normal single-family residential activities unless the director determines that these activities pose a hazard to public health, safety or welfare; and people who are implementing BMPs through another federal, state, or local program unless the County determines the alternative BMPs to be ineffective at reducing the discharge of contaminants.

The Surface Water Design Manual requires drainage review and sets requirements for new development and redevelopment to control soil erosion during construction, and to control the flow of stormwater runoff after development is completed.

For more information:
King County Department of Development and Environmental Services
(206) 296-6690

King County Surface Water Design Manual

Presented here is a summary of selected requirements of the *King County Surface Water Design Manual*. The manual requires drainage review and sets requirements for new development and redevelopment to control soil erosion during construction, and to control the flow of stormwater runoff after development is completed. Drainage review is required for any proposed project that would:

1. Add more than 5,000 square feet of new impervious surface.

2. Collect and concentrate surface and stormwater runoff from a drainage area of more than 5,000 square feet.

3. Contain, or abut, a floodplain, stream, wetland or closed depression, or a sensitive area as defined by the Sensitive Area Ordinance and Rules (King County Chapter 21.54).

The requirements that are most pertinent to businesses are:

1. If a project adds 5,000 or more square feet of impervious surface (buildings, paved surfaces or other structures), a stormwater detention and treatment facility must be installed according to a plan approved by the County (Core Requirement #3).

2. If a project adds 5,000 or more square feet subject to vehicle use (roads, parking lots, driveways, etc.), a biofiltration swale must be used to treat stormwater runoff from those areas (Core Requirement #3).

3. If construction occurs that exposes soil to erosion, an erosion control plan must be approved by the County and implemented (Core Requirement #6).

4. If a detention and treatment facility is installed it must be maintained (Core Requirement #7).

5. If the proposed project area exceeds 1 acre of new impervious surface, certain businesses may be subject to additional stormwater treatment requirements such as a wet pond (Special Requirement #5).

6. If the project area exceeds 5 acres of new impervious surface and is subject to petroleum storage, high vehicular use (more than 2,500 per day), or heavy equipment use or storage, then an oil/water separator is also required (Special Requirement #6).

Refer to the *King County Surface Water Design Manual* for details.

King County Fire Code Requirements

Storage of flammable, ignitive, and reactive chemicals and materials must comply with local fire codes.

Storage of flammable, ignitive, and reactive chemicals and materials must comply with local fire codes. The exact requirements depend on the type, quantity, and location of the materials. Of particular pertinence are Article 79, storage of flammable and combustible liquids, and Article 80, storage of hazardous materials.

1. Finished products that are flammable and combustible liquids can be stored inside the manufacturing building as long as they are stored in a room separated from the processing area by a two-hour occupancy separation (the wall must be able to withstand fire for two hours before a hole burns through).

2. Container and tank storage areas are to be protected against trespassers by fencing or other control measures. The area is to be kept free of weeds, debris, and other combustible materials.

3. The storage area is to be graded to divert spills away from buildings or surrounded by a 6-inch curb. If a curb is used, a drain shall be provided for draining of accumulations of rainwater or spills.

4. An operator or other competent person shall be in attendance at all times while a tank vehicle or tank car is discharging.

5. The area surrounding a tank or group of tanks shall be provided with drainage or shall be diked to prevent accidental discharge of liquid from endangering adjacent tanks, adjoining property, or reaching waterways.

6. The area within the dikes shall be sloped not less than 1 percent towards an impounding basin or an approved means of disposal.

For more information:
King County Fire Marshal
(206) 296-6675

7. The volume of the diked area shall not be less than the volume of the largest tank.

8. Drains shall be installed to remove water from the diked area. The drains shall not discharge to natural water courses, public sewers or drainage channels unless a valve, operable from outside the dike, prevents the release of flammable or combustible liquids.

9. Regarding loading / unloading, provision shall be made to prevent liquids from entering drainage systems, public sewers or natural waterways. Connections to such systems by which liquids might enter shall have separator boxes.

The construction of a small building to house hazardous materials may require sprinklers. See Article 10 of the Fire Code.

See Articles 10, 79, and 80 of the Fire Code for more details.

King County Code 21A.30 Animal (Livestock) Regulations

The code establishes regulations which set livestock densities and requires implementation of best management practices for minimizing non-point pollution from livestock.

For more information:
King County Agriculture and Resource Land Section
(206) 296-1471

The purpose of this code is to allow the raising and keeping of livestock in the county in a manner that minimizes the adverse impacts of livestock on the environment. The code establishes regulations which set livestock densities and requires implementation of best management practices for minimizing non-point pollution from livestock. The code requirements are summarized below.

Livestock - Densities

The minimum site which may be used to accommodate livestock is 20,000 square feet, provided that the portion of the total lot area used for confinement or grazing meets the requirements of the code.

The maximum number of livestock allowed varies depending on the uses and the implementation of management standards:

1. Commercial dairies are covered by a Washington State Department of Ecology NPDES Permit.

2. Six resident animal units per gross acre in stables, barns and other livestock operations with covered confinement areas, provided that no more than three animal units per gross acre are allowed to use uncovered grazing or confinement areas on a full time basis, and that either management standards in the code are met or a farm management plan is implemented and maintained. Higher densities may be allowed subject to the conditional use permit process to confirm compliance with the management standards.

3. For all livestock not covered by paragraph 1 or 2, three animal units per gross acre of vegetated site area, provided that the management standards in the code are met or a farm management plan is implemented and maintained. If the above can not be met then: one animal unit per two

acres of vegetated area, provided that the standards for storage and handling of manure are met.

An animal unit consists of one adult horse or bovine, two ponies, or five small livestock.

Livestock - Management Standards

To achieve higher animal densities, management standards must be implemented through either compliance with management standards in the code or development of a farm management plan. A farm management plan is site specific and prepared in conjunction with the King Conservation District. Management standards in both the farm management plan and the code require measures to manage: livestock watering, wetland and stream corridors, grazing and pastures, confinement areas, and manure handling and storage.

Implementation

All existing livestock operations shall either implement a farm management plan or meet the management standards in the code within five years of the adoption of the code (December 1993). A Livestock Oversight Committee has been established to oversee funding mechanisms and recommend funding schedules for programs that implement and evaluate the effectiveness of farm management plans and standards.

Solid Waste—The Seattle-King County Department of Public Health

Title 10 outlines requirements for solid waste storage and handling including: used oil, garbage containers, annual waste disposal, and composting.

King County Board of Health Title 10 outlines requirements on several aspects of solid waste that may overlap with concerns about stormwater quality: used oil, garbage containers, animal waste disposal, and composting.

According to Title 10:

1. Used oil shall not be disposed of in the household collection system, public sewer system, on-site sewage system, to surface or groundwater, or onto or under the ground surface. Used oil filters are not to be placed into the solid waste collection system unless thoroughly drained.

2. Garbage containers are to be watertight, equipped with a close-fitting, tight cover or screen, and non-leaking. They are to be cleaned frequently to prevent nuisances. The cleaning water must be disposed of to a sanitary sewer.

3. Dog wastes are to be disposed of in a manner that does not create a nuisance; they may be disposed of in a sanitary sewer but not into a septic tank.

4. Commercial composting facilities: The rule specifies location restrictions with regard to distance from seasonal groundwater, sole source aquifers, drinking water supply wells, surface water bodies, slope, adjacent land uses, sensitive biological resources, and parks (Section 10.48). It specifies that storage piles are to be placed on a surface that prevents subsurface soil and groundwater contamination, such as sealed concrete, asphalt, clay or an artificial liner. Runoff systems are to handle the 24-hour, 25-year event. A groundwater monitoring and leachate detection, collection, and treatment system is required if piles have a capacity of greater than 10,000 cubic yards.

5. Any wastes suspected of being a regulated dangerous waste may be screened by the Health Department. The process

For more information:
King County Environmental Health Division
(206) 296-4722

may involve certified testing, a disclosure of the waste constituents and waste generation process, and other additional information. Permits are issued for those wastes that will be allowed in the garbage. If it is determined that the waste is not a regulated dangerous waste but still poses a significant threat, the generator or the transporter may be directed to transfer the waste to a specified treatment or disposal site.

See King County Board of Health Title 10 for more detailed information.

Septic Tanks—Seattle-King County Department of Public Health

Only wastewater that is comparable to residential sewage in strength and constituency may be disposed of in septic systems.

Where wastewater cannot be discharged to a sanitary sewer, it may be possible to use a septic tank / drainage field. Only wastewater that is comparable to residential sewage in strength and constituency may be disposed of in septic systems. Hazardous chemicals may not be disposed in septic systems. The flow rate must be less than 14,500 gallons per day. See regulatory requirement R.9 in this chapter if a more sophisticated treatment system is to be used, or if the flow is greater than 14,500 gallons per day.

The specifications for individual on-site sewage systems are presented in King County Board of Health Title 13. The information presented here is of particular relevance to commercial properties.

1. Design must comply with Design Guidelines for Larger On-site Sewage Systems (December 1979), by the Washington State Departments of Ecology and Social and Health Services.

2. Prior to construction, plans and specifications must be submitted for approval.

3. A preliminary report is to be submitted to the Health Department prior to or concurrent with the preparation of the Plans and Specifications. Title 13 specifies the content of this report.

4. A detailed operation and maintenance manual must be prepared.

For more information:
King County Environmental Health Division
(206) 296-4722

The above items are to be prepared by a certified sewage disposal designer or professional engineer.

Title 13 provides specifications on the following items:

1. Soil testing.

2. Tank volume.

3. Drainage field area including reserve area.

4. Design criteria for the tank, drain field, and appurtenances.

5. Special systems such as sand filters and experimental systems.

6. Construction and inspection.

7. Monitoring.

See King County Board of Health Title 13 for more detailed information.

Local Sanitary Sewer Requirements for the Acceptance of Process Water or Stormwater

Discharging either process wastewater or stormwater to a public sanitary sewer requires approval of the local sewer authority.

Discharging any kind of wastewater to the sanitary sewer system other than sanitary sewage (water from toilets, sinks, showers, etc.), requires approval from the local sewer authority and the King County Department of Metropolitan Services (Metro) if the wastewater is generated within the Metro service area. In King County the local sewer authority can be an incorporated jurisdiction, city or town, or a sewer district.

Process Wastewater

Process wastewater is any water which, during manufacturing, processing, or other activity, comes into direct contact with, or results from production or use of any raw material, intermediate product, finished product, byproduct, or waste product. In order to be discharged to the sewer, this wastewater must meet specific limits for pollutants such as heavy metals, and fats, oils, and greases. In some cases pretreatment is necessary prior to discharge.

Discharging process wastewater to a sanitary sewer requires approval of both the local sewer agency and the King County Department of Metropolitan Services (Metro) if the wastewater is generated within the Metro service area. Permission to connect to the sewer system is also required from the local sewer agency. The volume of wastewater, amounts and types of materials present, will determine the nature of discharge approval that will be required from Metro. All discharges to the Metro sewer system, either directly or via a sewer utility that is connected to Metro, must be in accordance with Metro rules and regulations.

For more information:
King County Department of Metropolitan Services
(206) 689-3000

Stormwater

Stormwater is prohibited from being discharged to the sanitary sewer. An exception is stormwater associated with vehicle wash

pads with oil/water separators that have a drainage area of 200 square feet or less. Currently Metro is developing rules that may authorize the discharge of contaminated stormwater from certain types of industrial activities under certain circumstances. During the interim, contact Metro for more information regarding discharge of contaminated stormwater to the sanitary sewer from industrial activities when there are no viable alternatives.

Other Types of Wastewater

In addition to process water and stormwater, there are also rules and regulations that apply to other types of water that may be discharged to the sanitary sewer including cooling water, construction dewatering, and ground water from contaminated sites.

Pretreatment Requirements

In setting pretreatment requirements, the local sewer authority or Ecology must operate within state regulations WAC 173-216 (State Waste Discharge Permit Program) which in turn must comply with federal regulations 40 CFR 403.5 (National Pretreatment). Specific prohibitions include materials that:

1. Pass through the municipal treatment plant untreated or interfere with its operation.

2. Create a fire or explosion hazard, or create a public nuisance or hazard to life or prevents entry into the sewer for maintenance and repair, or be injurious in any other way to the operation of the system or the operating personnel.

3. Have a pH less than 5.0 or greater than 12.0, or have any corrosive property capable of causing damage or hazard to the system, equipment, or personnel.

4. Will cause obstruction to flows.

5. Will cause the sewage temperature to exceed 40° C or will in any case interfere with the biological activity in the municipal treatment plant.

The allowable concentrations of materials may vary with the particular sewer utility, since the responsibility of setting such limits rests with the local sewer authority, if it has been delegated the authority by Ecology, or by Ecology elsewhere.

Summarized below are some of the limits established by Metro (Local Industrial Discharge Limits, November 1990). Sewer authorities outside the Metro service area may have different requirements. Contact Metro Industrial Waste for information on discharge limits.

1. The concentration of nonpolar (petroleum) fats, oils, and greases (FOG) shall not exceed 100 mg/L. Discharges of polar (animal or vegetable) FOG are required to minimize floating FOG to prevent obstructing flow and causing maintenance problems.

2. The average daily concentration of the following cannot exceed the concentration indicated: arsenic, 1 mg/L; cadmium, 0.5 mg/L; chromium, 2.75 mg/L; copper, 3 mg/L; lead, 2 mg/L; mercury, 0.1 mg/L; nickel, 2.5 mg/L; silver, 1 mg/L; zinc, 5 mg/L; cyanide, 2 mg/L.

3. Many classes of organic compounds such as solvents are regulated. Many cannot be discharged into the sewer. Others can be discharged in small quantities.

Discharge of Process Wastewater to Surface Water —Washington State Department of Ecology

The Washington Department of Ecology must approve process waste water discharges to a surface water body.

If a public sanitary sewer is not available, process wastewater must be discharged after suitable treatment to a surface water body like a lake or stream, or to a drainage field. The approval of the Washington State Department of Ecology (Ecology) must be sought, both for the type and design of the treatment system, as well as the design and location of the outfall.

Some specific requirements include:

1. An engineering report must be prepared describing the proposed project. The general contents of the engineering report are specified by Ecology (WAC 173-240). The report is reviewed and approved Ecology.

2. The treatment system must be designed in accordance with Criteria for Sewage Works Design, October 1985, by Ecology.

3. The outfall must be designed in accordance with specific dilution zone dimensions (WAC 173-203-100).

4. The quality of the discharge into the receiving water must be treated and diluted (according to the dilution criteria noted above) so as to not result in a violation of water quality standards (WAC 173-203).

5. The treatment plant must be properly maintained and operated by a certified operator (WAC 173-230).

For more information:
Washington State Department of Ecology
(360) 407-6000

Recent actions by Ecology suggest it is unlikely to approve the installation of new outfalls except in the large rivers like the Green and Cedar. It is not likely to approve new outfalls in streams or lakes. Land treatment would not likely be acceptable to Ecology unless the operation is limited to the dry months.

Dangerous Waste Generators—Washington State Department of Ecology

The state dangerous waste regulations cover accumulation, storage, transportation, treatment, and disposal.

The state dangerous waste regulations (Chapter 173-303 WAC) cover accumulation, storage, transportation, treatment, and disposal. Of interest to this manual is the temporary accumulation of waste until taken from the site to a permitted disposal site. Only those regulations that apply to temporary storage are summarized here.

Permitted Generators

Businesses that generate or accumulate 220 pounds or more of dangerous waste (approximately one-half of a 55-gallon drum) in any one month must comply with the storage specifications outlined below.

If placed in containers:

1. If the container is not in good condition (for example severe rusting, apparent structural defects) or if it begins to leak, the owner must replace the container.
2. The container must be labeled as to its contents.
3. The container must be lined with a material that does not react with the waste.
4. The container must always be closed except when adding or removing waste.
5. The container must not be opened, handled, or stored in a manner which may cause a rupture or leak.
6. The container must be examined at least weekly for leakage.
7. Containers storing reactive or ignitable waste must meet requirements of the Uniform Fire Code.

For more information:
Washington State Department of Ecology
(206) 649-7000 (Bellevue)
(360) 407-6000 (Olympia)

8. Incompatible wastes must be stored separately.

9. The Washington State Department of Ecology (Ecology) may require secondary containment of the storage area. Specifically, the storage area must:

    a. Be capable of collecting and holding spills and leaks.

    b. If uncovered, be capable of handling a 25-year storm.

    c. Have a base that is free of cracks or gaps and is sufficiently impervious to leaks, spills, and rainfall.

    d. Be sloped or designed so that liquids can drain to a point for removal.

    e. Have positive drainage control (e.g., a valve) to ensure containment until any liquid is removed, which must occur in a timely manner.

    f. Have a holding capacity equal to 10 percent of the volume of all containers or the volume of the largest container, whichever is greater.

    g. Not allow runoff of rainfall from areas adjacent to the storage area.

If the waste does not contain free liquids, the above requirements need not be met, provided that the area is sloped or the containers are elevated.

If placed in tanks:

1. The tank must be lined with a material that does not react with the waste.

2. The tank, tank area, and its ancillary equipment must be inspected according to a written schedule.

3. If retired, the tank is to be cleaned of all contents.

4. Tanks storing reactive or ignitable waste must meet the Uniform Fire Code.

5. Incompatible wastes must be stored separately.

The generators must have a designated employee on site or on call with the responsibility for coordinating all emergency

response measures. Spills are to be contained and cleaned up as soon as practicable.

Small-Quantity Waste Generators

Small quantity waste generators are businesses that generate or accumulate less than 220 pounds of dangerous waste per month or per batch (or 2.2 pounds of extremely hazardous waste). Staying under these quantities avoids detailed reporting and oversight by Ecology. Small-quantity generators still fall under Ecology regulations to the extent that the materials must be properly stored on site until shipment. The wastes must be shipped before 220 pounds are accumulated to maintain this status. Once the accumulation exceeds 220 pounds, the waste must be shipped within the next 180 days.

These businesses must dispose of the waste in a manner acceptable to Ecology and the Seattle-King County Department of Public Health. Options may include:

1. Disposal of the waste at a facility permitted by Ecology.

2. Disposal of the material at a recycling facility that legitimately recycles or reuses the waste.

3. Disposal of the waste to a permitted municipal or industrial landfill (with approval).

The Seattle-King County Local Hazardous Waste Management Program provides assistance to these businesses. See Chapter 6 for more information.

Dangerous Waste Pollution Prevention Plans

A recent state law established the requirement that generators of dangerous wastes prepare a waste reduction plan, called a pollution prevention plan. The required content of the plan is set forth in *Pollution Prevention Planning—Guidance Manual*, January 1992, Publication #91-2, for WAC 173-307.

The schedule for plan submission to Ecology is:

1. By September 1, 1992, for generators that produce more than 50,000 pounds annually.

2. By September 1, 1993, for generators that produce between 7,000 and 50,000 pounds annually.

3. By September 1, 1994, for generators that produce between 2,640 and 7,000 pounds annually.

Many of the actions described in these plans may benefit stormwater quality and thus should be integrated into any decisions about the implementation of BMPs.

See WAC 173-303 and 307 for further detail. Also "Pollution Prevention Planning Guidance Manual," January 1992, #91-2, by Ecology.

Groundwater Quality Protection—Washington State Department of Ecology

Washington State has established numeric standards to prevent groundwater pollution.

In December 1990, Washington State adopted groundwater standards to prevent groundwater pollution (WAC 173-200). The following standards were established:

1. Chemical variables are limited (see the numerical limits shown below). Also shown below are standard concentrations of each variable in stormwater based on local field data.

Variable	Standard	Stormwater	Variable	Standard	Stormwater
Fecal Coliform	1 org/100 ml	1000	Zinc	5.0 mg/l	0.150
Nitrate	10 mg/l	0.20	2,4-D	0.10 mg/l	0.01
Arsenic	0.05 mg/l	0.010	Endrin	0.0002 mg/l	0.0001
Cadmium	0.01 mg/l	0.0006	Lindane	0.004 mg/l	0.00005
Chromium	0.05 mg/l	0.008	Methoxychlor	0.10 mg/l	0.001
Copper	1.0 mg/l	0.020	2,4,5-TP	0.01 mg/l	0.00005
Lead	0.05 mg/l	0.15	Benzene	0.005 mg/l	0.010
Mercury	0.0002 mg/l				

For more information:
Washington State Department of Ecology
(206) 649-7000 (Bellevue)
(360) 407-6000 (Olympia)

2. Antidegradation measures are set forth. This means that if the quality of the groundwater already is better than the numeric limits, then the current groundwater quality must be maintained.

3. It requires that all activities with the potential to contaminate water implement BMPs that meet all known and reasonable treatment (AKART).

4. AKART must be used regardless of the quality of the groundwater.

5. In individual cases where AKART is not adequate to protect groundwater quality, the business must provide additional controls.

6. The standards do not apply to the root zone of saturated soils where pesticides or nutrients have been applied at agronomic rates for agricultural purposes.

See WAC 173-200 for more details.

NPDES Industrial Stormwater Permit-- Washington State Department of Ecology

Some businesses must obtain a NPDES permit to improve the quality of stormwater run-off from their sites.

The National Pollutant Discharge Elimination System (NPDES) program was established by federal regulation to improve the quality of stormwater from industries or industrial-type activities.

A business must obtain a permit for a facility only if its primary activity falls under one of the below categories. If the facility has two types of businesses and the primary business is not subject to an NPDES permit, then a permit need not be obtained for the facility. If the facility has two business activities and only the primary business falls under one of the above categories, the permit need not include the area where the secondary business is occurring if its stormwater discharges to its own drainage system. However, if it drains to the same system as the primary business, the entire drainage system is covered by the permit and the BMPs must cover both business activities.

The program requires the submission of a Notice of Intent to the Department of Ecology, the preparation of a stormwater pollution prevention plan (SWPPP), and compliance with other permit conditions. The SWPPP must include an assessment of pollutant sources and pollutants, a site map, description of BMP's to be implemented, and an implementation schedule.

The 11 categories listed below are required to have NPDES stormwater permits.

1. Facilities subject to federal regulations under 40 CFR Subchapter N, except facilities with toxic pollutant effluent standards already covered by a different permit program. Exempted industries that may be present in King County: coal mining, sand and gravel mining, and paving and roofing material production.
2. Facilities listed under the following standard industrial classifications (SIC):
   - 24 Lumber and wood products except: 2434 - kitchen cabinets

For more information:
Washington State Department of Ecology
(206) 649-7000 (Bellevue)
(360) 407-6000 (Olympia)

- 26 Paper and allied products except: 265 - paperboard containers and 267 - converted paper and paperboard products
- -28 Chemicals and allied products except: 283 - drugs
- -29 Petroleum and coal products
- -311 Leather tanning and finishing
- -32 Stone, clay and glass products except: 323 - glass products made from purchased glass
- -33 Primary metals industries
- -3441 Fabricated structural metal
- -373 Ship and boat building / repairing

3. Facilities classified as SIC 10 through 14:
   - 10 Metal mining
   - 12 Coal mining
   - 13 Oil and gas extraction
   - 14 Mining and quarrying of non-metallic minerals, except fuels

There are some special conditions for the above facilities. See the Washington State Department of Ecology General Industrial Permit for these conditions.

4. Hazardous waste treatment, storage, or disposal facilities.
5. Landfills, land application sites, and open dumps.
6. Recycling facilities including metal scrap yards, battery reclaimers, salvage yards, and automobile junk yards, classified as SIC 5015 and 5093.
7. Steam electric power generating facilities.
8. Transportation facilities shown below if they have either vehicle maintenance shops, equipment cleaning, or airport deicing. Only the portion of the facility with these activities and activities listed under the other 10 categories need be permitted:
   - 40 Railroad transport
   - 41 Local / interurban passenger transport
   - 42 Motor freight transport and warehousing except: 4221 - farm product warehousing and storage; 4222 - refrigerated warehousing; 4225 - general warehousing and storage
   - 43 United States Postal Service
   - 44 Water transport
   - 45 Transport by air
   - 5171 Petroleum bulk stations / terminals

9. Treatment works including domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge. Not included are farm lands, domestic gardens, or lands used for sludge management where sludge is beneficially reused.
10. Construction, except for operations that disturb less than 5 acres of total land area which are not part of a larger common plan of development or sale.
11. Facilities with these SICs if outside activities are exposed to stormwater:
    - 20 Food and kindred products
    - 21 Tobacco products
    - 22 Textile mill products
    - 23 Apparel / other textile products
    - 2434 Wood kitchen cabinets
    - 25 Furniture and fixtures
    - 265 Paperboard containers / boxes
    - 267 Converted paper / paper board products
    - 27 Printing publishing products
    - 283 Drugs
    - 285 Paints, varnishes, lacquers, enamels, and allied products
    - 30 Rubber and miscellaneous plastic products
    - 31 Leather and leather products except: 311 - leather tanning
    - 323 Glass products made of purchased products glass
    - 34 Fabricated metal products except: 3441 - fabricated structural metals
    - 35 Industrial and commercial machinery and computer equipment
    - 36 Electronic / electrical equipment
    - 37 Transportation equipment except: 373 - ship / boat building & repair
    - 38 Measuring, analyzing and controlling instruments, photo, medical / optical goods, watches / clocks
    - 39 Misc. manufacturing industries
    - 4221 Farm product warehousing and storage
    - 4222 Refrigerated warehousing / storage
    - 4225 General warehousing / storage

Underground Storage Tanks--
Washington State Department of Ecology

Businesses with underground storage tanks must comply with Ecology regulations.

Businesses with underground storage tanks must comply with regulations in Chapter 173-360 WAC. These regulations are for underground tanks (tank system having 10 percent or more of its volume underground) containing petroleum or listed hazardous substances.

Exempt Tanks

There are a variety of tanks that are exempt from these regulations. Consult chapter 173-360-100 (2) for a complete list. Some exemptions include:

1. Farm and residential tanks holding 1,100 gallons or less of motor fuel.
2. Tanks storing heating oil used on premises.
3. Tanks on or above floor of underground areas.
4. Septic tanks.
5. Tanks holding 110 gallons or less.
6. Emergency spill and overflow tanks.
7. Tanks that store dangerous waste, as defined or regulated by RCRA Subtitle I.
8. Flow-through process tanks.
9. Tanks that store regulated substances for the operation of equipment (i.e. hydraulic lift cylinders).
10. Wastewater treatment tanks that are part of wastewater treatment facilities.

For more information:
Washington State Department of Ecology
1-800-826-7716
or
(206) 649-7000 (Bellevue)

Requirements for New Tanks (Installed After December 1988)

At installation new UST systems (both tank and piping) must be:

1. Installed by a licensed supervisor according to the manufacturer's instructions or a nationally recognized standard.
2. Equipped with spill and overfill prevention devices (tank only).
3. Protected from corrosion.
4. Monitored monthly for releases.
5. Covered by a financial assurance mechanism that will pay for the costs of responding to a release or reimbursing third parties for damage.

Requirements for Existing Tanks (Installed Before December 1988)

Existing UST systems must be:

1. Monitored for releases by an appropriate method for existing tanks.
2. Covered by a financial assurance mechanism that will pay for the costs of responding to a release or reimbursing third parties for damage.
3. Equipped with spill and overfill prevention devices by December 1998.
4. Protected from corrosion by December 1998.
5. Monitored monthly for releases by December 1998.

Reporting Requirements

1. Notification of tank installation, 30 days.
2. Notification of tank decommissioning, 30 days.
3. Reporting suspected releases from operational systems, 24 hours.

4. Confirming suspected releases from operational systems, 7 days.

5. Reporting confirmed release at decommissioning, 24 hours.

Reporting of Suspected Releases

Owners/operators must report within 24 hours, or another reasonable time specified by the Washington State Department of Ecology, and follow procedures outlined in the regulations for any of the following:

1. Discovery of release at tank site or surrounding area.

2. Unusual operation conditions such as sudden loss of product, equipment behavior, unexplained water in tank.

3. Monitoring results indicating a release may have occurred unless the monitoring device was found to be defective or, in the case of inventory control, if the second month does not confirm initial data.

Record Keeping Requirements

1. Records of leak detection performance and maintenance; previous year monitoring results and most recent tightness test results, including:

    a. Leak detection equipment performance claims, 5 years.

    b. Leak detection equipment calibration and maintenance, 5 years.

    c. Leak detection results, 5 years.

2. Records of the last two corrosion protection system inspections.

3. Closure records should be kept for 5 years.

4. Records of repairs or upgrades should be kept for the operational life of the UST system.

Spill Prevention and Control Plan—U.S. EPA and Washington State Department of Ecology

Many businesses are required to have a prevention and control plan to prevent, contain, and clean-up spills.

USEPA - Spill Prevention Control and Cleanup (SPCC) Plans (40 CFR 112)

This federal regulation requires that certain facilities engaged in drilling, producing, gathering, storing, processing, refining, transferring, or consuming oil and oil products are required to have a spill prevention and control plan (SPCC), provided that the facility is non-transportation related; and, that the aboveground storage of a single container is in excess of 660 gallons, or an aggregate capacity greater than 1,320 gallons, or a total below ground capacity in excess of 42,000 gallons.

The plan must:

1. Be well thought out in accordance with good engineering.
2. Achieve three objectives prevent spills, contain spills that occur, cleanup spills.
3. Identify name, location, owner, and type of facility.
4. Have date of initial operation and oil spill history.
5. Designate the person responsible.
6. Be approved and certified by the person in authority.
7. Contain a facility analysis.

See Federal Regulation 40 CFR 112 for further detail.

For more information:

Washington State Dept. of Ecology
(206) 649-7000 (Bellevue)
(360) 407-6000 (Olympia)

U.S. Environmental Protection Agency
1-800-424-4EPA or (206) 553-1200

Ecology Dangerous Wastes (WAC 173-303)

The regulations require that large quantity generators and permitted treatment storage and disposal facilities have a contingency plan that includes:

1. Actions taken in the event of spill.
2. Descriptions of arrangements with local agencies.
3. Identification of the owner's emergency coordinator.
4. List of emergency equipment.
5. Evacuation plan for business personnel.

Medium quantity generators should follow standards in Chapter 173-303-201 WAC.

See WAC 173-303 for further detail on who is covered by the Dangerous Waste Regulations and the specific requirements.

Structural Pesticide Applicators - Seattle-King County Department of Public Health

This regulation requires commercial structural pesticide applicators within King County to register with the Seattle-King County Department of Public Health.

This regulation (King County Board of Health Title 7) requires commercial structural pesticide applicators within King County to register with the Seattle-King County Department of Public Health and to comply with various requirements. Examples of commercial pest control activities that are subject to King County licensing include the control of the following pests in or upon structures: wood destroying organisms, moss, rodents, spiders, fleas, ants, wasps, cockroaches, flies, and food and commodity pests. Companies that perform work under the Washington State Department of Agriculture categories of General Pest Control Operator, Structural Pest Control Operator, and Structural Demossing are, in most cases, required to maintain the King County license. Requirements include:

1. All companies that are engaged in the business of structural pest control and apply pesticides upon or within structures in King County are to apply for and maintain annual business registration.

2. Each company must have a person on staff who is competent in managing the pesticide application practices of all employees. This person is called a Master Structural Pesticide Applicator.

3. This master pesticide applicator is required to take and pass a Health Department examination to demonstrate competency and safety in pesticide application.

For more information:
King County Environmental Health Division
(206) 296-4722

The Health Department is authorized to develop an incentive-based merit system to promote good pesticide management practices. Merit points will be awarded to companies for the following elements: providing customers with pesticide information sheets and guidelines on integrated pest management, operating in accordance with a written policy for integrated pest management, demonstrating proper disposal procedures for pesticides, having a public exposure control plan, and

providing customers with target pest identification services. Merit points accumulated under the system will be used as positive incentives for the pesticide applicators, such as reduced annual fees for license renewal, reduced penalties for confirmed violations of pesticide application standards, designation of the company's merit status on their registration, and non-monetary achievement awards.

See King County Board of Health Title 7 for more detailed information and contact the King County Department of Public Health.

Pesticide Regulations - Washington Department of Agriculture

Pesticide applicators must comply with appropriate state law concerning licensing, storage, handling and application.

Washington State pesticide laws are administered by the state's Department of Agriculture, under the Washington Pesticide Control Act (RCW 15.58), Washington Pesticide Application Action (RCW 17.21), and regulations in WAC 16.201 and 16.228.

1. Persons who apply pesticides are required to be licensed except:

    a. People who use general-use pesticides on their own or their employer's property.

    b. Grounds maintenance people using only general use pesticides on an occasional basis not amounting to a regular occupation.

    c. Governmental employees who apply general use pesticides without utilizing any kind of motorized or pressurized apparatus.

    d. Employees of a commercial applicator or a government agency who are under direct on-site supervision by a licensed applicator.

2. Licensed applicators must undergo 40 hours of continuing education to keep the license.

3. No person shall pollute streams, lakes, and other water supplies in pesticide loading, mixing and application.

4. No person shall transport, handle, store, load, apply, or dispose of any pesticide, pesticide container, or apparatus in such a manner as to pollute water supplies or waterways, or cause damage or injury to land, including human beings, desirable plants, and animals.

See WAC 16.201 and 16.228 for further detail on the storage, handling and application of pesticides.

For more information:
Washington State Department of Agriculture
(360) 902-2040

Air Quality—Puget Sound Air Pollution Control Agency

PSAPCA requires that reasonable precaution be taken to prevent fugitive particulate material from becoming airborne, when handling, loading, transporting or storing particulate material.

The Puget Sound region is under the jurisdiction of regional air quality authorities who in turn must function under Washington State and federal air quality regulations. The Puget Sound Air Pollution Control Agency (PSAPCA) is the regulatory agency for air quality in King County.

Of direct interest to this manual is air authority policies on fugitive dust and outside painting. PSAPCA requires that reasonable precaution be taken to prevent fugitive particulate material from becoming airborne, when handling, loading, transporting or storing particulate material. PSAPCA defines what are reasonable precautions such as: the paving of parking lots and storage areas; housekeeping measures (for example, sweeping) to minimize the accumulation of mud and dust, and to prevent its tracking onto public roads; and, stabilization of storage piles with water spray, chemical stabilizers, tarps, or enclosure.

PSAPCA can require that reasonable precautions be taken to prevent the tracking of material onto public roads. One precaution is wheel-washing of trucks.

See Regulation II, PSAPCA, for further detail.

For more information:
Puget Sound Air Pollution Control Agency
(206) 343-8800 or 1-800-552-3565

PSAPCA requires that fugitive dust controls be used to prevent air pollution. Fugitive dust is defined as particulate matter or any visible air contaminant other than uncombined water that is not collected by a capture system and emitted from a stack, but is released at the point of generation. For many activities such as construction, demolition, and stockpiling, use of water spray to control dust is specified by PSAPCA as an acceptable practice.

PSAPCA may also require that abrasive blasting and spray painting operations be performed inside a booth designed to capture the blast grit or overspray. Outdoor blasting or painting of structures or items too large to be handled indoors needs to

be controlled through measures such as curtailment during windy periods and enclosure of the area being painted or blasted with tarps. Containers of solvents and coatings are to be kept closed. The Compliance Guidelines specify how spraying equipment is to be cleaned. It also requires an operation and maintenance Plan for spray operations.

See "Agency Policy on Fugitive Dust Controls," PSAPCA, for detailed information on dust control requirements.

Requirements of Native American Tribes

Several tribes in the King County area have lands and continuing treaty interests in natural resources.

Tribal staff review federal, state, and local permits for projects on tribal lands or projects on non-tribal lands that may affect treaty-reserved resources or areas. Several tribes in the King County area, including the Muckleshoot and Puyallup Indian Tribes and the Tulalip Tribe, have lands and continuing treaty interests in natural resources. Check with their Natural Resource or Environmental Divisions for more information on the treaty rights and the permit review role of the tribes.

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